

[METHOD AND APPARATUS FOR TRANSFERRING SOLDER BUMPS]

Abstract

The present invention relates to improvements in forming and transferring solder bumps for use in mounting integrated circuit substrates on chip carrier packages. A mold having cavities for the solder bumps is held in contact with a substrate and a compressible device. As the temperature is increased to melt the solder in the cavities, at an appropriate time and temperature, the compressible device is caused to decompress resulting in the mold separating from the substrate and leaving formed solder bumps on the contacts on the substrate. Various mechanisms are described to cause the force holding the mold and substrate together to decrease.